

ABSTRACT OF THE DISCLOSURE

A system for analyzing vehicle and driver behavior includes: a data preprocessing unit that converts operation information of an in-vehicle electrical system, data available via an in-vehicle datanetwork, and additional information available from an electrical device constituting a vehicle into a format capable of calculation therein; a vehicle model and estimation unit that estimates variables which can not be measured by means of in-vehicle sensors based on the preprocessed data; a model-based reconstruction unit that reconstructs an accident scenario by unifying the preprocessed data and the estimated variables from the vehicle model and estimation unit to a common time stamp; and an assessment unit that assesses vehicle and driver behavior based on the accident scenario reconstructed by the model-based reconstruction unit.